

WHAT IS CLAIMED IS:

1. A liquid crystal display device comprising first and second substrates, a liquid crystal layer interposed between the first and the second substrates, a plurality of scanning signal lines and a plurality of data signal lines which are formed on the first substrate, and common signal lines which are arranged close to the scanning signal lines, wherein

each unit pixel which is formed as a region surrounded by the scanning signal lines and the data signal lines includes pixel electrode to which signals of the data signal line is electrically supplied through a thin film transistor and common electrode which are electrically connected with the common signal line,

the common signal electrode is arranged to be superposed on the common signal line by way of an insulation layer, and the pixel electrode is electrically connected with a source electrode of the thin film transistor via a through hole which penetrates the insulation layer, and

the common electrode is formed such that the common electrode extend in the inside of the unit pixel while covering the common signal line.

2. A liquid crystal display device according to claim 1, wherein

the pixel electrode has an end portion thereof in the direction toward the inside of the unit pixel from the common

electrode, the source electrode has a projecting portion which projects in the direction which intersects the extending direction of the common electrode, the projecting portion is positioned between the common signal line and the pixel electrode, and a portion of the projecting portion is disposed at a position where the portion is superposed on the pixel electrode and is connected to the pixel electrode via the through hole,

assuming a distance between a region forming an edge of the source electrode parallel to the scanning signal line and being different from the projecting portion and the pixel electrode as "b" and a distance between the pixel electrode and the common electrode in the direction which is orthogonal to the scanning signal line as "c", the relationship  $b > c$  is established.

3. A liquid crystal display device according to claim 1, wherein

the pixel electrode has an end portion thereof in the direction toward the inside of the unit pixel from the common electrode, the source electrode has a projecting portion which projects in the direction which intersects the extending direction of the common electrode, the projecting portion is positioned between the common signal line and the pixel electrode, and a portion of the projecting portion is disposed at a position where the portion is superposed on the pixel electrode and is connected to the pixel electrode via the through hole,

assuming a distance between the projecting portion and an end portion of the pixel electrode in the direction parallel to the scanning signal lines as "a", and a distance between the pixel electrode and the common electrode in the direction orthogonal to the scanning signal lines as "c", the relationship  $a > c$  is established.

4. A liquid crystal display device according to claim 1, wherein the common electrode which is formed such that the common electrode extend in the inside of the unit pixel while covering the common signal line block an electric field between the common signal line and the pixel electrode.

5. A liquid crystal display device comprising first and second substrates, a liquid crystal layer interposed between the first and the second substrates, a plurality of scanning signal lines and a plurality of data signal lines which are formed on the first substrate, and common signal lines which are arranged close to the scanning signal lines, wherein

each unit pixel which is formed as a region surrounded by the scanning signal lines and the data signal lines includes pixel electrode to which signals of the data signal line is electrically supplied through a thin film transistor and common electrode which is electrically connected with the common signal line,

the common electrode is arranged to be superposed on the common signal line by way of an insulation layer, and the pixel

electrod is electrically connected with a source electrode of the thin film transistor via a through hole which penetrates the insulation layer, and

a portion of the pixel electrode includes an overhanging portion which overhangs above the common signal line from the unit pixel.

6. A liquid crystal display device according to claim 5, wherein the source electrode includes a projecting portion and the projecting portion is superposed on the overhanging portion of the pixel electrode and is formed in the direction which faces the overhanging portion in an opposed manner.

7. A liquid crystal display device according to claim 6, wherein assuming a distance of the projecting portion of the source electrode from an end portion of the common signal line as "a", the distance "a" is set to  $a \geq 0$ .

8. A liquid crystal display device according to claim 6, wherein assuming a distance between the projecting portion and the end portion in the direction parallel to the scanning signal line at the pixel electrode as "b" and a distance between the pixel electrode and the common electrode in the direction parallel to the scanning signal line in the overhannging portion of the pixel electrode as "c", the relationship  $b > c \times 2.0$  is established.

9. A liquid crystal display device according to any claim 5, wherein the common electrode is formed such that the common

electrode extend in the inside of the unit pixel while covering the common signal line except for a portion along the overhanging portion of the pixel electrode so as to block an electric field between the common signal line and the pixel electrode.

10. A liquid crystal display device comprising first and second substrates, a liquid crystal layer interposed between the first and the second substrates, a plurality of scanning signal lines and a plurality of data signal lines which are formed on the first substrate, and common signal lines which are arranged close to the scanning signal lines, wherein

each unit pixel which is formed as a region surrounded by the scanning signal lines and the data signal lines includes pixel electrode to which signals of the data signal line is electrically supplied through a thin film transistor and common electrode which is electrically connected with the common signal line,

the common electrode is arranged to be superposed on the common signal line by way of an insulation layer, and the pixel electrode is electrically connected with a source electrode of the thin film transistor via a through hole which penetrates the insulation layer,

a portion of the pixel electrode includes an enlarged portion which strides over the common signal line from the inside of the unit pixel, and

the common electrode is formed such that the common

electrode extend the inside of the unit pixel while covering the common signal line except for portions along the enlarged portions of the pixel electrode.

11. A liquid crystal display device according to claim 10, wherein assuming a distance between the enlarged portion of the pixel electrode and the common electrode in the direction parallel to the scanning signal lines as "b" and a distance between the pixel electrode other than the enlarged portion of the pixel electrode and the common electrode in the direction parallel to the scanning signal line as "a", the relationship  $a > b$  is established.

12. A liquid crystal display device according to claim 10, wherein assuming a distance between the enlarged portion of the pixel electrode and the common electrode in the direction parallel to the scanning signal lines as "b" and a distance between an end portion of the enlarged portion of the pixel electrode at a side remote from the common electrode and the common signal line as "c", the relationship  $b < 2c$  is established.

13. A liquid crystal display device according to claim 10, wherein the enlarged portion of the pixel electrode blocks an electric field from the common signal line.

14. A liquid crystal display device comprising first and second substrates, a liquid crystal layer interposed between the first and the second substrates, a plurality of scanning signal lines and a plurality of data signal lines which are formed

on the first substrate, and common signal lines which are arranged close to the scanning signal lines, wherein

each unit pixel which is formed as a region surrounded by the scanning signal lines and the data signal lines includes pixel electrode to which signals of the data signal line is electrically supplied through a thin film transistor and common electrode which is electrically connected with the common signal line,

the common electrode is arranged to be superposed on the common signal line by way of an insulation layer, and the pixel electrode is electrically connected with a source electrode of the thin film transistor via a through hole which penetrates the insulation layer,

a portion of the pixel electrode includes an enlarged portion which strides above the common signal line from the inside of the unit pixel, and

the common electrode and the projecting portion of the pixel electrode have overhanging portions which are formed in the same direction with respect to the extending direction of the scanning signal line.

15. A liquid crystal display device according to claim 14, wherein an angle  $\theta$  which is made by the common electrode and the overhanging portion of the common electrode is set to  $90^\circ \leq \theta < 180^\circ$ .

16. A liquid crystal display device according to claim

14, wherein an angle  $\theta$  which is made by the pixel electrode and the overhanging portion of the pixel electrode is set to  $90^\circ \leq \theta < 180^\circ$ .

17. A liquid crystal display device according to claim 14, wherein the angle which is made by the pixel electrode and the overhanging portion of the pixel electrode is substantially equal to the angle which is made by the common electrode and the overhanging portion of the common electrode.

18. A liquid crystal display device according to claim 14, wherein assuming a distance between the common electrode and the source electrode at the overhanging portion of the common electrode as "a", a distance between an end portion of the source electrode above the common signal line and an end portion of the common signal line as "b", and a distance between the overhanging portion of the common electrode and the enlarged portion of the pixel electrode as "c", the relationship  $(a-b) > c$  is established.

19. A liquid crystal display device in which scanning signal lines, data signal lines, thin film transistors, source electrodes which are connected to the thin film transistors, pixel electrodes, common electrodes which is formed on the same layer as the pixel electrode, and common signal lines which are formed on a layer different from a layer on which the common electrodes are formed on a first substrate which constitutes one substrate out of a pair of substrates constituted of the



first substrate and a second substrate which are arranged to face each other in an opposed manner with liquid crystal therebetween, and a light blocking layer is formed on the second substrate which constitutes another substrate out of the pair of substrates which are arranged to face each other in an opposed manner, wherein the common electrode and the common signal line have superposed portions,

the source electrodes and the common signal lines have superposed portion,

either one of the source electrodes and the pixel electrodes have protruding portions in plane, and are connected to another one of the source electrodes and the pixel electrodes at the protruding portions, and

the protruding portion has a region in which a distance between the protruding portion and the common electrode in the direction parallel to the scanning signal lines is larger than a distance between the pixel electrode and the common electrode in the direction parallel to the scanning signal line in a region which is exposed from the light blocking layer.

20. A liquid crystal display device in which scanning signal lines, data signal lines, thin film transistors, source electrodes which are connected to the thin film transistors, pixel electrodes, common electrodes which are formed on the same layer as the pixel electrodes, and common signal lines which are formed on a layer different from a layer on which the common

electrodes are formed are formed on a first substrate which constitutes one substrate out of a pair of substrates constituted of the first substrate and a second substrate which are arranged to face each other in an opposed manner with liquid crystal therebetween, and a light blocking layer is formed on the second substrate which constitutes another substrate out of the pair of substrates which are arranged to face each other in an opposed manner, wherein the common electrode and the common signal lines have superposed portions,

the source electrodes and the common signal lines have superposed portion,

the pixel electrodes are provided in a plural number in the inside of the pixel and include connecting portions which connect the plurality of pixel electrodes, and

the connecting portion has a region in which a distance between the connecting portion and the common electrode in the direction parallel to the scanning signal lines is smaller than a distance between the pixel electrode and the common electrode in the direction parallel to the scanning signal lines in the region which is exposed from the light blocking layer.